PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference	FOR FURTHER ACTION	see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.
44.7.78613/001		
International application No.	International filing date *(day/month/year)*	(Earliest) Priority Date *(day/month/year)*
PCT/GB 03/04712	31/10/2003	01/11/2002
Applicant		
CARROTECH AS		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 8 sheets.

[X] It is also accompanied by a copy of each prior art document cited in this report.

1. **Basis of the report**

   a. With regard to the **language,** the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

   [ ] the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

   b. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international search was carried out on the basis of the sequence listing :

   [ ] contained in the international application in written form.

   [ ] filed together with the international application in computer readable form.

   [X] furnished subsequently to this Authority in written form.

   [X] furnished subsequently to this Authority in computer readble form.

   [X] the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.

   [X] the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

2. [ ] **Certain claims were found unsearchable** (See Box I).

3. [X] **Unity of invention is lacking** (see Box II).

4. With regard to the **title,**

   [ ] the text is approved as submitted by the applicant.

   [X] the text has been established by this Authority to read as follows:

   ASSAY METHOD FOR DETECTING FUNGAL INFECTION OF SOIL OR VEGETABLES

5. With regard to the **abstract,**

   [X] the text is approved as submitted by the applicant.

   [ ] the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the **drawings** to be published with the abstract is Figure No. _____

   [ ] as suggested by the applicant.

   [ ] because the applicant failed to suggest a figure.

   [ ] because this figure better characterizes the invention.

   [ ] None of the figures.

INTERNATIONAL SEARCH REPORT

International Application No
PCT 03/04712

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 C12Q1/68

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 C12Q

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)
EPO-Internal, BIOSIS, MEDLINE, PAJ, WPI Data, EMBASE

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	KAGEYAMA K ET AL: "DETECTION OF PYTHIUM ULTIMUM USING POLYMERASE CHAIN REACTION WITH SPECIES-SPECIFIC PRIMERS" PLANT DISEASE, AMERICAN PHYTOPATHOLOGICAL SOCIETY, ST. PAUL, MN, US, vol. 81, October 1997 (1997-10), pages 1155-1160, XP009024662 ISSN: 0191-2917 page 1155, column 3, lines 23-48 page 1156, column 1, line 4 - column 3, line 3 table 1 figure 1 ----- -/--	1,2,4, 6-8, 10-15,17

[X] Further documents are listed in the continuation of box C.

[ ] Patent family members are listed in annex.

° Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
6 April 2004	08. 07. 2004

Name and mailing address of the ISA	Authorized officer
European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Helliot, B

Form PCT/ISA/210 (second sheet) (January 2004)

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	MATSUMOTO CHIEKO ET AL: "Phylogenetic relationships of Pythium species based on ITS and 5.8S sequences of the ribosomal DNA" MYCOSCIENCE, vol. 40, no. 4, 15 August 1999 (1999-08-15), pages 321-331, XP001180153 ISSN: 1340-3540 page 329, column 2, lines 37-39 figure 1	1,2,4, 6-8, 10-15,17
Y	LEVESQUE C A ET AL: "The use of DNA arrays for direct detection of oomycetes from roots and soils" CANADIAN JOURNAL OF PLANT PATHOLOGY, vol. 22, no. 2, June 2000 (2000-06), page 188, XP009028449 Annual Meeting of the Canadian Phytopathological Society, 2000;Victoria, British Colombia, Canada ISSN: 0706-0661 abstract	1,2,4, 6-8, 10-15,17
Y	QUAIL A ET AL: "Pythium identification by hybridization to a DNA array" CANADIAN JOURNAL OF PLANT PATHOLOGY, vol. 22, no. 2, June 2000 (2000-06), page 191, XP009028447 Annual Meeting of the Canadian Phytopathological Society, 2000;Victoria, British Colombia, Canada ISSN: 0706-0661 abstract	1,2,4, 6-8, 10-15,17
Y	WANG P H ET AL: "Specific detection of Pythium aphanidermatum from hydroponic nutrient solution by booster PCR with DNA primers developed from mitochondrial DNA." PHYTOPARASITICA, vol. 30, no. 5, October 2002 (2002-10), pages 473-485, XP009027978 ISSN: 0334-2123 the whole document	1,2,4, 6-8, 10-15,17

-/--

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	LEVESQUE C ANDRE ET AL: "Identification of some oomycetes by reverse dot blot hybridization" PHYTOPATHOLOGY, vol. 88, no. 3, March 1998 (1998-03), pages 213-222, XP001180427 ISSN: 0031-949X table 1 page 217, column 1, line 9 - column 2, line 3 figure 2 page 221, column 1	1,2,4, 6-8, 10-15,17
Y,P	KAGEYAMA KOJI ET AL: "Refined PCR protocol for detection of plant pathogens in soil." JOURNAL OF GENERAL PLANT PATHOLOGY, vol. 69, no. 3, June 2003 (2003-06), pages 153-160, XP002275151 ISSN: 1345-2630 (ISSN print) page 155, column 1, line 20 - column 2, line 9 page 154, column 1, line 47 - column 2, line 15	1,2,4, 6-8, 10-15,17
Y,P	BARASUBIYE T ET AL: "Molecular identification and detection of root rot pathogens in soybean." PHYTOPATHOLOGY, vol. 93, no. 6 Supplement, June 2003 (2003-06), page S6, XP002275152 Annual Meeting of the American Phytopathological Society;Charlotte, North Carolina, USA; August 09-13, 2003 ISSN: 0031-949X (ISSN print) abstract	6,11,12
Y,P	WANG P H ET AL: "Use of polymerase chain reaction to detect the soft rot pathogen, Pythium myriotylum, in infected ginger rhizomes." LETTERS IN APPLIED MICROBIOLOGY, vol. 36, no. 2, 2003, pages 116-120, XP001180354 ISSN: 0266-8254 page 117, column 2, lines 7-10 figures 1-3 table 1	1,2,4, 6-8, 10-15,17

-/--

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y,P	WANG P H ET AL: "Detection of the low-germination-rate resting oospores of Pythium myriotylum from soil by PCR." LETTERS IN APPLIED MICROBIOLOGY. ENGLAND 2003, vol. 36, no. 3, 2003, pages 157-161, XP001180356 ISSN: 0266-8254 figures 1-4	1,2,4, 6-8, 10-15,17
Y,P	WANG P H ET AL: "Species-specific PCR primers for Pythium developed from ribosomal ITS1 region." LETTERS IN APPLIED MICROBIOLOGY. ENGLAND 2003, vol. 37, no. 2, 2003, pages 127-132, XP001180355 ISSN: 0266-8254 tables 1-3	1,2,4, 6-8, 10-15,17
T	WANG P H ET AL: "Erratum: Species-specific PCR primers for Pythium developed from ribosomal ITS1 region (Letters in Applied Microbiology (2003) 37 (127-132))" LETTERS IN APPLIED MICROBIOLOGY 2004 UNITED KINGDOM, vol. 38, no. 1, 2004, page 78, XP001180357 ISSN: 0266-8254 the whole document	1,2,4, 6-8, 10-15,17

5